

**Records and descriptions of some Mexican  
species of the genus *Phaea* Newman**

(Coleoptera: Cerambycidae)

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The lamiine genus *Phaea* Newman is represented by about 30 described species occurring from the United States to Colombia. The group attains its greatest development in Mexico and Central America where a majority of the species are found.

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*Phaea* is closely related to the genus *Tetraopes* Schonherr and some of the species of each greatly resemble each other. *Phaea* may be characterized by the usually moderate to small size, cylindrical form, usual slight expansion of the elytra toward the apex, completely divided eyes, convex front of the head, usually apically asperate scape of the antennae, ventral flying hairs of the antennal segments, usually well-developed thoracic umbone, short legs and appendiculate tarsal claws. The last abdominal sternite of females is inflated, somewhat elongate, and longitudinally, linearly impressed. The bifid tarsal claws of *Tetraopes* will immediately separate that genus.

This preliminary study is the result of many years of field collecting and accumulating specimens from most available institutions and collections. The basic problem in attempting to present a comprehensive review of the genus at this time is the lack of adequate material. Whereas some species are represented by large series, others are still known only from the types. For various reasons, only a small portion of the Mexican species are treated at this time. In addition to the descriptions of new species, several of the less common previously described species are characterized and new records listed.

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*Phaea biplagiata*, new species

Male: Form small, subparallel; integument reddish to orange, femora yellowish, apices of mandibles, eyes, antennae and part of tibiae black, elytra usually with narrow black stripes extending from humeri to about middle. Head with front moderately convex, moderately densely, separately punctate, densely clothed with pale appressed pubescence; impression between antennal tubercles shallow, vertex sparsely punctate; antennae slender, slightly longer than body, scape moderate, apically asperate, densely punctate, third segment subequal in length to fourth, fourth longer than fifth, succeeding segments becoming progressively shorter, segments densely clothed with short, dark, subappressed pubescence, grayish beneath on basal segments, cilliae numerous beneath, becoming sparser toward apex. Pronotum slightly broader than long, sides sinuate; umbone large, rounded, distinctly delimited at anterior half, densely punctate at sides with a long, erect seta arising from each puncture; apical impression shallow, basal impression moderate; sides irregularly punctate, moderately pubescent; prosternum finely pubescent; meso- and metasternum finely punctate, moderately densely, finely pubescent. Elytra more than 2½ times as long as broad, slightly expanding at apex; punctures moderately coarse, separated, linearly arranged, becoming obsolete toward apex; short, pale, appressed pubescence dense behind middle, long, erect hairs denser toward base; apices rounded. Legs short, rather slender, moderately pubescent. Abdomen finely punctate, moderately densely pubescent; last sternite elongate, narrowly rounded at apex. Length, 8-9 mm.

Female: Form more robust. Antennae shorter than body. Abdomen with last sternite linearly impressed. Length, 9-11 mm.

Holotype male, allotype (California Academy of Sciences) from Taxco, Guerrero, Mexico, 6000 ft, 24 June, 1937 (M.A. Embury). Paratypes as follows: 1♂, Taxco, July, 1959 (Krauss); 1♂, El Salto, Durango, Mexico, 9300 ft, 5 June, 1937 (Embury); 1♀, 38 miles E. Villa Union, Sinaloa, Mexico, 9 August, 1964 (Howden); 1♀, Apatzingan, Michoacan, Mexico, 1200 ft, 16 August, 1941 (Haag); 1♂, Santa Lucia, Sinaloa, Mexico, 4000 ft, 4 August, 1964 (Kelton); 1♀, San Blas, Nayarit, Mexico, 22 March, 1962 (Stange); 1♂, 6 miles E. Cuernavaca, Morelos, Mexico, 1 September, 1974 (Bohart, Hanson); 1♂, 1♀, 7 miles SW Yautepec, Morelos, Mexico, 3500 ft, 2 July, 1961 (U. Kansas Mex. Exped.); 1♀, 30 miles NE Tehuantepec, Oaxaca, Mexico, 8 July, 1955 (Guiliani); 1♀, Isth. of Tehuantepec (Sumichrast); 1♂, 1♀, Tuxtla Gutierrez, Chiapas, Mexico, August, 1959 (Krauss); 1♂, 1♀, Suchiapa, Chiapas, Mexico, 17 July and 18 August, 1957 (Chemsak, Rannells, Hurd, Durham). 1♂, Champerico, Guatemala, 3 August, 1905 (Knab).

The small size, usual presence of the black longitudinal lines extending back from the humeri and dense, pale pubescence over the apical one-half of the elytra separate this species.

Most specimens at hand possess the dark markings of the elytra. These are, however, reduced in some and absent in one. The color varies from bright reddish to orange.

*Phaea flavovittata* Bates

*Phaea flavovittata* Bates, 1881: 197; Chemsak, 1967: 79 (lectotype).

Small, black, with front of head and broad line down vertex extending longitudinally down pronotum, orange. Antennae black, scape apically asperate, long, erect hairs beneath not abundant. Pronotum with umbone moderately elevated, rounded, distinctly delimited at sides of apical one-half. Scutellum pale. Elytra coarsely, linearly punctate at basal half; pubescence dense, short, depressed with numerous, long, erect hairs inter-

spersed. Femora pale basally. Underside dark, moderately densely pubescent. Abdomen of female with last segment longitudinally impressed. Length, 6-9 mm.

Type locality: Chacoj, Vera Paz, Guatemala.

New records: 2♂♂, 14 miles N. Tuxtla Gutierrez, Chiapas, 11 July, 1952 (Gilbert and MacNeill).

### *Phaea latifrons*, new species

Male: Form small, parallel; integument reddish, apices of mandibles, eyes, antennae from apex of scape, umbone, basal spots at sides of pronotum, most of underside, apices of front and middle femora and apical one-fourth of elytra black. Head with front flattened, very broad, much broader across eyes than width of pronotum, rather sparsely punctate, very finely, densely pubescent; area between antennal tubercles barely impressed, vertex sparsely punctate; antennae slender, shorter than body, scape flattened, apically asperate, densely punctate, third segment equal to fourth, fourth slightly longer than fifth, remaining segments gradually decreasing in length, segments densely clothed with short, subdepressed pubescence, ciliae long, numerous. Pronotum about as long as broad, sides slightly sinuate; umbone broad, not prominently elevated, sides not distinctly delimited, middle densely punctate, densely clothed with long, erect, black hairs; sides very sparsely punctate except for median lobes; pubescence fine, pale, appressed, moderately dense with long erect black setae moderately interspersed, base at middle thinly fringed; apical impression shallow, basal impression fairly deep; prosternum finely pubescent; meso- and metasternum finely punctate and pubescent. Elytra about 3 times as long as broad, sides parallel; punctures coarse, linearly arranged, separated; pubescence long, suberect, arising from punctures, underlying pubescence white, short, subdepressed, moderately dense; apices rounded. Legs short, femora stout; pubescence fine, moderately dense. Abdomen finely punctate, moderately densely pubescent; last sternite subtruncate at apex. Length, 9 mm.

Holotype male (National Museum of Natural History) and 1 male paratype from Puerto Angel, Oaxaca, Mexico, 31 July, 1965 (A.B. Lau).

This species may be readily recognized by the broadened head and low, densely pubescent umbone.

### *Phaea marthae*, new species

Female: Form moderate sized, sides subparallel; integument black, head except mandibles and eyes, pronotum dorsally except umbone, reddish, elytra reddish over basal two-thirds except for spots on humeri. Head with front moderately strongly convex, moderately coarsely, densely punctate, densely clothed with very fine, pale pubescence with longer, erect black setae numerous interspersed; area between antennal tubercles very shallowly impressed, vertex finely, very sparsely punctate; antennae slender, extending to about second abdominal segment, scape dorsally flattened, strongly asperate apically, densely punctate, third segment slightly longer than fourth, fourth longer than fifth, remaining segments gradually decreasing in length, segments from fourth densely clothed with short appressed pubescence which is dark above and grayish below, long, erect setae sparse beneath. Pronotum broader than long, sides sinuate; umbone large, elevated, very sharply delimited at sides, very finely, densely punctate; long erect hairs dense, brushlike; sides very sparsely, finely punctate, each puncture giving rise to a long black seta; apical impression shallow, basal impression deep; prosternum transversely rugulose, sparsely pubescent; meso- and metasternum very finely, densely punctate, finely, densely pubescent. Elytra over 2½ times as long as broad, sides shallowly impressed at middle; punctures moderately coarse, sparse, well separated, irregular; pubescence fine, short, pale, with numerous long, erect hairs interspersed, particularly toward base; apices rounded. Legs short, femora finely, densely punctate, finely, densely



pubescent. Abdomen finely, very densely punctate, densely pubescent; last sternite linearly impressed. Length, 13 mm.

Holotype female (California Academy of Sciences) from 9 miles N Mazatlan, Sinaloa, Mexico, 25-28 July, 1972 (J. and M.A. Chemsak, A. and M. Michelbacher).

This species may be readily recognized by the coloration, prominent thoracic umbone, and by the sparse punctation of the elytra.

*P. marthae* is dedicated to Mrs. Martha Michelbacher in recognition of her field assistance.

***Phaea maryannae*, new species**  
(Fig. 1)

Male: Form moderate sized, subparallel; integument reddish to orange, mandibles, eyes, appendages, underside, spots on pronotum, scutellum, humeral spots and apices of elytra black. Head with front strongly convex, moderately coarsely, shallowly punctate, pubescence very fine, depressed; impression between antennal tubercles very deep, vertex very sparsely punctate; antennae stout, longer than body, scape robust, apically asperate, densely punctate, third segment subequal to fourth, fourth longer than fifth, succeeding segments becoming gradually shorter, segments moderately densely clothed with short appressed pubescence which is black above and grayish beneath, basal segments sparsely ciliate beneath. Pronotum slightly broader than long, sides sinuate; umbone large, rounded, sides not delimited, punctures minute, very sparse; a large black spot present anteriorly on each side of umbone, two small spots usually at sides near base, an irregular spot also present at sides below median swelling; apex shallowly impressed, base deeply impressed; pubescence sparse, short with a few long, erect hairs interspersed; prosternum finely, moderately densely pubescent; mesosternum finely pubescent, intercoxal process almost plane; metasternum strongly convex, densely, minutely punctate, densely clothed with grayish subdepressed pubescence. Elytra more than twice as long as broad, sides slightly impressed at middle then expanding toward apices; humeri with black spots; apical one-fourth with anteriorly rounded black spots; basal punctures fine, sparse, punctures toward middle larger, irregular, well separated, becoming obsolete toward apex; pubescence very fine, yellowish, longer erect hairs numerous over basal one-half, pubescence on apical spots black; apices broadly rounded. Legs short, stout, gray pubescent. Abdomen minutely, densely punctate, moderately densely pubescent; last sternite narrowly rounded at apex. Length, 12-13 mm.

Female: Form more robust. Antennae shorter than body. Legs with femora more slender. Abdomen with pygidium exposed, last sternite inflated, linearly impressed at middle. Length, 16-17 mm.

Holotype male (California Academy of Sciences) and 4 male paratypes from 9 miles N. Mazatlan, Sinaloa, Mexico, 25-28 July, 1972 (J. and M.A. Chemsak, A. and M. Michelbacher). Additional paratypes as follows: 1♂, 14 miles S. Cuernavaca, Morelos, Mexico, 3 August, 1954 (U. Kansas Mex. Exped.); 1♀, Iguala, Guerrero, Mexico, September (Barrett); 1♀, Mexico, Mexico, 1950.

This species is distinctive by the large, non-delimited, rounded umbone with black spots at the corners and by the apical black spots of the elytra which curve out from the lateral margins back toward the suture.

The type series is relatively constant in coloration except for the occasional lack of the two basal spots of the pronotum.

This red-headed species is dedicated to Mary Ann Chemsak for the obvious reason in addition to her collecting efforts.

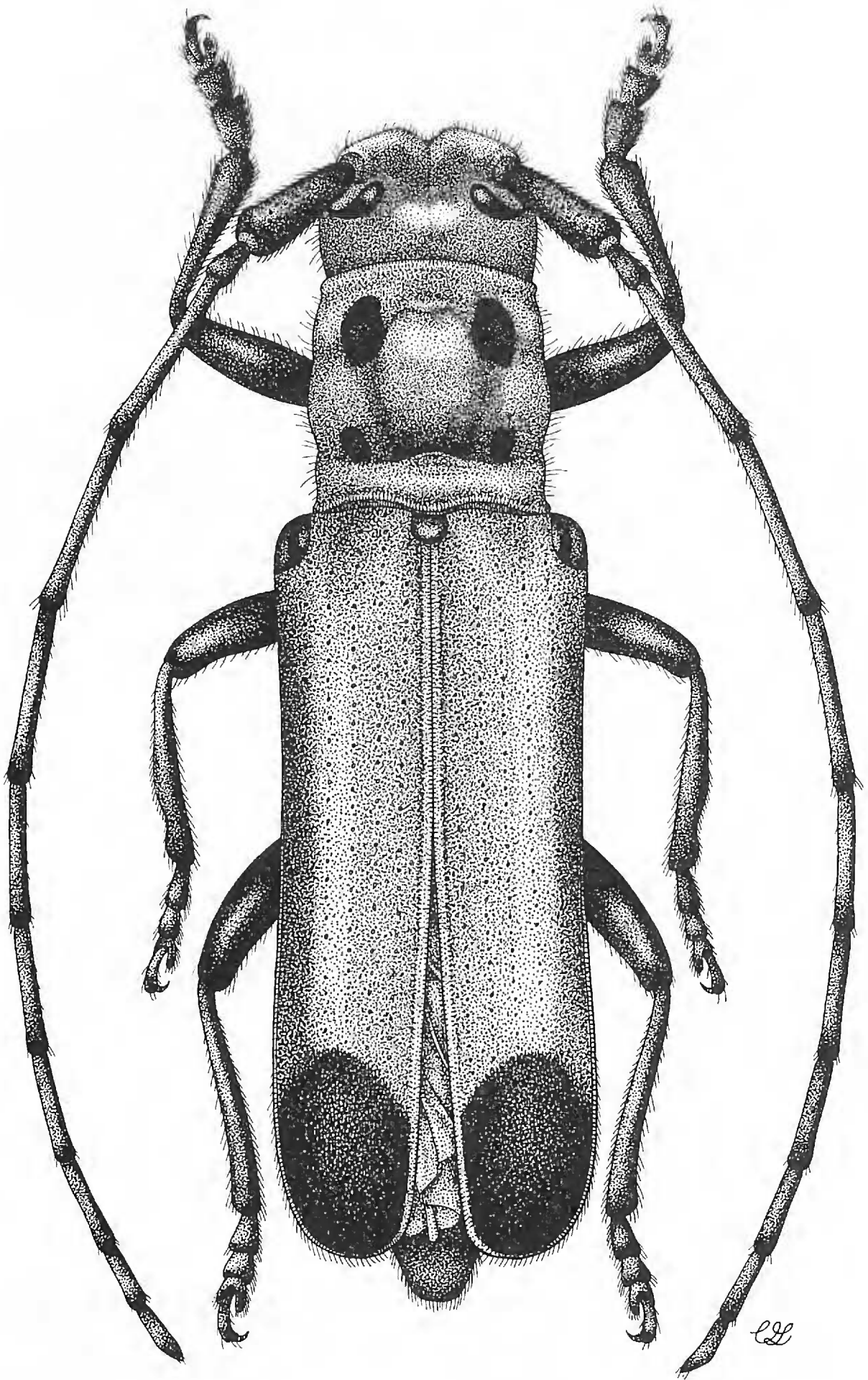


Fig. 1. *Phaea maryannae*, new species.



*Phaea miniata* Pascoe

*Phaea miniata* Pascoe, 1858: 256.

*Phaea lineola* Bates, 1872: 228; Bates, 1881: 198. **New synonymy.**

Form rather small, elytra expanding apically. Integument reddish except for tips of mandibles, eyes, apical half of antennal scape, antennae and tibiae and tarsi, which are black, elytra often with narrow black stripes extending from humeri to middle. Head of males with a prominent tubercle on front at middle. Antennae slender, about as long as body, scape apically asperate. Pronotum with umbone shallow, not delimited, rounded. Elytra sparsely, sublinearly punctate, punctures well separated; pubescence fine, moderately sparse, short and appressed and long and erect. Abdomen sparsely pubescent, last sternite linearly impressed in females. Length, 7-10 mm.

Type locality: of *miniata*, Venezuela; *lineola*, Chontales, Nicaragua.

Known from Mexico to Venezuela.

New records: 7♂♂, 14♀♀, Simojovel, Chiapas, 18-31 July, 1958 (J.A. Chemsak). This species was collected on fence posts during the day.

The elytra occasionally have black longitudinal stripes. In addition to the specimens described as *lineola* from Nicaragua, two from Costa Rica are at hand.

The rounded, barely elevated thoracic umbone and prominent tubercle on the front of the head of males make this species distinctive.

*Phaea saperda* Newman

*Phaea saperda* Newman, 1840:14; Bates, 1881:195.

*Phoea saperda*, Thomson, 1864:121.

*Lamprocleptes entomologorum* Thomson, 1857:65.

Form moderate-sized, elytra expanding apically. Head, except eyes, pronotum, underside and often elytra for varying widths at base, bright red to orange, antennae, except apex and legs, yellowish. Antennae with scape apically asperate, long erect hairs moderate. Elytra sparsely punctate at base, punctures becoming larger and denser toward middle along suture then obsolete at apex; pubescence fine, grayish, appressed, long erect hairs moderately numerous. Abdomen of female with a median line on last sternite. Length, 8-14 mm.

Type locality: of *saperda*, Mexico; *entomologorum*, Brasil?

Known from Mexico, Guatemala and Belize.

New records: San Luis Potosi: 1♂, El Pujal, 18 May, 1950 (M. Sanchez); 1♀, El Salto, 18 June, 1962 (J.M. Campbell); 1♀, 20 miles N Tamazunchale, 30 July 1960 (Howden); 1♂, Tamazunchale, 21 June, 1962 (Campbell). Veracruz: 1♂, 4♀, Cordoba, 8 July, 1965 (Lau), 12, 22 June, 1965 (Lau), 1 October, 1963 (Lau), 16 May, 1946 (J. and D. Pallister); 1♀, Catemaco, 8 June, 1965 (Burke, Meyer, Shaffner); 1♂, 1♀, Puente Nacional, 21 June, 1962 (Janzen); 2♀♀, Lake Catemaco, 8-16 August, 1960 (Howden); 1♂, Sn. Rafeal Jicaltepec, 22 June, 1896; 1♀, SE Citlaltepeltl, Fortin, 3 July, 1964 (Swan). Oaxaca: 1♂, 16 miles N Matias Romero, 25 June, 1961 (Carney); 1♀, 25 miles N Matias Romero, 4 August, 1970 (Fisher, Sullivan).

The color of the elytra is subject to variation ranging from all-black to almost the basal one-half reddish.

### Phaea semirufa Bates

*Phaea semirufa* Bates, 1872:228; Bates, 1881:198.

*Phaea scapularis* Bates, 1881:198, Chemsak, 1967:79 (lectotype). **New synonymy.**

Form small, expanding posteriorly, Head and pronotum yellow except for a broad, black line extending from behind eyes down sides of pronotum, antennae black, segments from fourth or fifth basally pale, elytra usually yellowish basally at sides from humeri to about middle, black band usually angled from sides to scutellum, basal half occasionally all yellow, femora yellow at basal half. Antennae stout, densely ciliate, ciliae much longer beneath. Pronotum longer than broad; umbone broad, sides margined, moderately elevated, sparsely punctate; pubescence long, bristling. Elytra coarsely, contiguously, linearly punctate, punctures arranged in six rows, becoming finer toward apex; pubescence long, bristling, with underlying short, appressed pubescence; apices subtruncate. Abdomen with last sternite with a median line in females. Length, 8-9 mm.

Type locality: of *semirufa*, Mexico; *scapularis*, Zapote, Guatemala. Known only from Mexico and Guatemala.

New records: 1♂, 7.3 miles SSW Yautepec, Morelos, 2 July, 1961, 3500 ft. (U. Kansas Exped.); 1♀, Tierra Colorado, Guerrero, 15 August, 1938 (L.J. Lipovski); 1♀, 49 miles S. Acayucan, Veracruz, 19 July, 1963 (W. Foster); 1♂, 16.2 miles N. Puente Nacional, Veracruz, 21 June, 1962 (Janzen); 1♀, Temescal, Oaxaca, 2 June, 1969 (Janzen); 1♂, 4 miles NW Pueblo Nuevo, River Bajada, Chiapas, 30 July, 1965 (G.H. Nelson); 1♂, 7 mi SE Chiapa de Corzo, Chiapas, 23 June, 1965 (Burke, Meyer, Schaffner).

The coloration and broad-appearing antennae suggest a lycid model for this species.

### Phaea tricolor Bates

*Phaea tricolor* Bates, 1881: 199; Chemsak, 1967:79 (lectotype).

Form small, subparallel. Integument black, head and pronotum orange, umbone black, elytra yellowish at basal half except for area around black scutellum and spots on humeri, anterior edge of black band usually directed back from suture to lateral margins. Head a little broader across eyes than pronotum, vertex with numerous, long, erect, black hairs; antennae moderately densely ciliate. Pronotum with umbone low, broad, extending from apex to base, sides not distinctly delimited, sides finely, densely punctate, erect ciliae numerous, middle glabrous, basal margin fringed at middle. Elytra coarsely, densely punctate, punctures contiguous, becoming obsolete at apex; pubescence dense, short and subdepressed and long and erect, longest at base. Underside finely, not densely pubescent. Abdomen with last sternite linearly impressed in females. Length, 9mm.

Type locality: Cordoba.

Known from Mexico and Guatemala.

New records: 2♀♀, 20 miles S. Ciudad Victoria, Tamaulipas, 17 June, 1941 (H. Dybas); 1♀, Tamazunchale, San Luis Potosi, 4-5 July, 1964 (Fisher, Verity).

The coloration suggests a mimetic association although possible models are not yet known.

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### ZOOLOGICAL NOMENCLATURE

The following Opinions (listed by number) have been published recently by the International Commission on Zoological Nomenclature (see *Bulletin Zoological Nomenclature* Volume 34, part 3, 9 November, 1977). ITZN 59.

- Opinion No. 1093 (p. 143) *Apis rotundata* Fabricius, 1787 (Insecta: Hymenoptera): designation under the plenary powers of a neotype.
- Opinion No. 1094 (p. 147) Refusal of request to correct the following on the Official List of Family-Group Names in Zoology:
- No. 61 GYROPIDAE Kellogg, 1896 (Insecta: Mallophaga)
  - No. 139 PYRALIDAE Latreille, 1809 (Insecta: Lepidoptera)
  - No. 199 EPISEMIDAE Guénée, 1852 (Insecta: Lepidoptera)
  - No. 207 TRIOPSIDAE Keilhack, 1909 (Crustacea, Phyllopoda)
  - No. 213 TRETASPINAE Whittington, 1941 (Trilobita)
  - No. 324 TRINOTONIDAE Eichler, 1941 (Insecta: Mallophaga)
- Opinion No. 1096 (p. 155) *Psednura longicornis*, Sjostedt, 1920 (Insecta: Orthoptera): designation under plenary powers.
- Opinion No. 1099 (p. 164) *Drosophila mercatorum* Patterson & Wheeler, 1942 (Insecta, Diptera) conservation of;  
*Drosophila carinata* Grimshaw, 1901, suppression of.

The Commission cannot supply separates of Opinions.